

**Analysis of Liabilities
and
Estimate of future liabilities
And assessments
Of The
South Carolina Second Injury Fund
As of June 30 2005
Calculated
As of
November 29, 2005**

Report prepared by

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**South Carolina Second Injury Fund
Analysis of Claim Liabilities
Report of Liabilities
And
Estimate of future liabilities
And assessments**

Part 1 - Introduction:

I have been retained by The South Carolina Second Injury Fund (the Fund) to provide an actuarial estimate of liabilities as of June 30, 2005 for Workers' Compensation claims and reimbursements. In addition, I have been retained to provide an estimate of the future liabilities and expected assessments of the Fund for each of the next five years. These estimates include amounts payable by and assessments payable to the Fund under the current Workers' Compensation laws of South Carolina.

This report fulfills all requirements of the Actuarial Standards Board of The American Academy of Actuaries and other relevant criteria promulgated by actuarial bodies governing actuarial reports. I have used standard actuarial techniques herein and have applied actuarial judgment where necessary to model the actuarial aspects of the Fund's loss reserving process.

In estimating liabilities, I have applied reasonable procedures and methodologies. Estimated loss reserves are subject to errors of estimation as ultimate liabilities are affected by events and conditions that have not yet occurred. It is assumed that historical loss patterns are good indicators of future loss payments. In this current analysis, additional estimates have been performed relative to the expected future impact of previously passed legislation. Because of the limitation of the data supplied and the uncertainty of statistical elements associated with forecasting, I cannot guarantee that these estimates will prove to be adequate or not excessive.

The South Carolina Second Injury Fund operates on an annual cash flow basis. Funding is on a continuing basis through equitable assessments upon each insurance carrier (including insurers, self-insurers and the State Accident Fund).

Before the Fund can reimburse an employer, a disabled worker must suffer a subsequent injury. This injury must combine with or aggravate the prior impairment, thus causing liability substantially greater than that which would have occurred from the subsequent injury alone.

A major purpose of the Fund is to provide protections to disabled employment seekers by providing protection to the employer who hires those with disabilities. The requirements for reimbursements by the Fund were previously expanded to include conditions where the employer “can prove that he did not have prior knowledge of the employee’s pre-existing physical impairment, because existence of such condition was concealed by the employee or was unknown to the employee”. This provision was eliminated through legislation passed in 2003.

This report will provide an estimate of the total liabilities of the South Carolina Second Injury Fund for accidents that occurred prior to July 1, 2005 evaluated as of November 29, 2005 (the date the information was provided by the Fund to produce the analysis). To assist in understanding and in the interest of full disclosure, all data and calculations used in this analysis may be found in this report.

This report will also provide an estimate of the total liabilities of the Fund as of the end of each of the next five fiscal years as well as an estimate of the expected assessments for each of the next five fiscal years. Graphical depictions of relevant criteria may be found on Charts 1 and 2 which have also been made a part of this report.

DISCLOSURES:

Beginning in fiscal year 1999, insurers and self insurers initiated a substantial increase in the submission of claims to the Fund for reimbursement. It is believed that this was due to the fear of closure of the Fund; and a corresponding attempt to search through old claim files for claims that had not been submitted previously but were felt to be reimbursable by the Fund.

The increased claim submission activity intensified when legislation was considered and subsequently passed relative to the future elimination of “unknown condition” claims. The increased reimbursement activity produced a temporary “spike” in Second Injury Fund reimbursements. This spike may be seen on Chart 1 at the end of this analysis which presents the ultimate reimbursements of the Fund by accident year.

On June 25, 2003, the South Carolina statute was amended, eliminating the participation of the Fund for “unknown conditions”, applicable to future accident years. This will bring about substantial reductions in future liabilities of the Fund. It is expected the Fund’s accident year reimbursements will decrease by approximately 40% to 50% due to this legislation. In addition, “old” claim files have been gleaned for possible reimbursement, and it is believed that additional reductions will take place in future reimbursements compared to those during fiscal years 1999 through 2005.

In addition, it is apparent that the pattern of claim payments will be different following the passage of this legislation from the pattern that was present during years when unknown condition claims were statutorily accepted by the Fund. Therefore, selections of factors for future claim patterns are different from those that apply to pre-legislation accident years.

Due to a lag between accident dates (upon which all Fund activity is based) and the actual reimbursements from the Fund, it takes several months to witness the impact of “reimbursement reduction legislation” such as the removal of unknown condition claims. Beginning in fiscal year 2005-2006, the Fund is witnessing noticeable reductions in reimbursement requests relative to unknown conditions. These reductions, which are due to the fact that insurers and self insurers have submitted most if not all of their “old” and pre-accident year 2003 unknown condition claim files for reimbursement, are expected to continue and ultimately stabilize in the future, and have been incorporated in the calculations used in this analysis.

Although future Fund activity may increase due to the application of the Second Injury Fund benefits to employers who hire wounded and disabled soldiers returning from Iraq, it is expected that the financial impacts of providing Fund assistance for employers who hire these returning GI’s will not be appreciable, and this analysis makes no adjustment for the impact of Fund coverage applicable to those Iraq war veterans.

A summary of the results of this report may be found in Part 3 – Estimated Results of Analysis at the end of this report.

Part 2a – Data and Methodologies:

At my request, I received from the South Carolina Second Injury Fund, the following information, which is assumed to be accurate and is used in this analysis without audit.

1. Dollars and numbers of claims paid during each fiscal year from “fiscal year July 1, 1994 – June 30 1995” “to fiscal year July 1, 2004 – June 30, 2005” separately provided by the year in which the accident occurred from July 1, 1994 to June 30, 2005.
2. Fiscal year claims paid by the Fund from July 1, 1994 through June 30, 2005.
3. South Carolina Second Injury Fund Annual Reports and audit reports

The above cited information was used to produce a paid loss development analysis to further determine the amount of the Fund’s claim liabilities as of the date of the report providing the information. That date is November 29, 2005 and all resulting liabilities determined by this analysis are South Carolina Second Injury Fund Liabilities for accidents that occurred prior to July 1, 2005, valued as of November 29, 2005.

The estimated Fund liabilities as of June 30, 2005 are calculated by utilizing the methods used in this analysis following the production of the paid claim data through that date.

Part 2b - Paid Loss Development Analysis

Exhibit 1 presents the information obtained from the Fund in response to a request for claim payments for each fiscal year separated by the year during which the accident occurred (the accident year). Each cell in Exhibit 1 relates to the payment during a specific fiscal year of claims relating to a specific accident year. The information on Exhibit 1 is reproduced directly from the information supplied by the Second Injury Fund.

Exhibit 2 produces the cumulative claims paid for each fiscal year relative to a specific fiscal accident year. This cumulative information is used to estimate the pattern of fiscal accident year claim payments made by the Fund from the fiscal year in which the first claim payment was made for claims that occurred during that accident year through the fiscal year in which the last payment is made by the Fund for accidents that occurred during that fiscal accident year. In other words, the analysis determines the amounts paid for accidents that occurred in 1995 and were paid in 1995, 1996, 1997, etc. until all claims have been paid for all accidents that occurred in 1995. The same process is used to determine the payment pattern for accident years 1996, 1997, 1998, etc.

In Exhibit 3, the payment patterns of claims as described above are converted into “year-to-year” factors. The factors on the upper part of Table 3 indicate how claims are paid over time for accidents that occurred during a specific year.

The information calculated in the upper part of Exhibit 3 is summarized in the lower part of Exhibit 3. Several different averages are calculated, and a “selection” is made based upon the past patterns of claim payments and our most recent knowledge of the Fund’s operations. These “selections” are called “loss development factors” and are used to estimate the future claim payment patterns.

The “loss (reimbursement) development factors” produced on Exhibit 4 are used on Exhibit 5 to determine the total amount of claim dollars that are ultimately expected to be paid for each accident year from 1995 through 2005. The total amount of claim payments made for an accident year are known as the “ultimate losses” for that accident year and are shown in column 3 of Exhibit 5. Subtracting the amounts paid to-date from the ultimate claim dollars produces the unpaid claim dollars. The unpaid claim dollars for an accident year equal the Fund’s current liabilities (as of 11/29/05) for future claim payments for accidents that occurred in each accident year (1995 through 2005). A visual depiction of the paid and ultimate reimbursements for each accident year through 2005 is presented on Chart 2 at the end of this analysis.

This information is used to produce estimated Fund payments for each year in the future from fiscal year 2006 through fiscal year 2011 on Exhibit 6.

Exhibit 7 uses the information from Exhibit 6 to produce an estimate of the unfunded liabilities of the Fund for each fiscal year from 2006 through 2011.

Exhibit 8 produces calculations of the estimated Fund assessments for each fiscal year through 2011.

Part 3 – Estimation Results of Analysis

The extraordinary increase in claims submitted to the Fund for reimbursement has produced a short term increase in the unfunded liabilities and assessments. The unfunded liabilities of the Fund as of June 30, 2005 are estimated to be \$455,008,327.

- 1) **Since the increase in liabilities of the Fund are temporary, there will be a substantial amount of funds remaining at the end of this current fiscal year, resulting in dramatic reductions in assessments for the next five years.**
- 2) **The unfunded liabilities for each fiscal year from 2005 through 2011 are estimated to be as follows:**

year	unfunded liabilities
2,005	455,008,327
2,006	279,334,741
2,007	280,500,784
2,008	277,512,480
2,009	291,640,930
2,010	313,787,852
2,011	322,348,244

- 3) **The estimated future Fund assessments through 2011 are as follows:**

year	estimated assessment
2,006	\$77,088,529.63
2,007	\$85,397,988.83
2,008	\$72,584,498.06
2,009	\$68,855,578.91
2,010	\$86,688,750.62
2,011	\$82,748,469.69

EXHIBIT 1

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S. C. SECOND INJURY FUND
 CLAIMS MANAGEMENT SYSTEM
 AMOUNT PAID BY FISCAL YEAR

PGRM: LCL617NP
 USER: FDAHL

YEAR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1995	192,586	5,332,348	15,701,863	15,265,457	7,993,534	5,161,953	3,716,051	1,925,266	2,045,604	1,063,736	1,132,115
1996		141,061	5,935,342	14,682,360	15,934,872	9,774,984	6,109,217	4,026,521	3,185,276	1,325,047	1,769,060
1997			160,386	6,637,974	17,877,590	17,294,729	12,073,359	7,481,758	5,962,805	2,585,658	2,168,317
1998				320,352	7,586,804	19,422,031	20,604,366	18,451,957	10,717,816	6,700,052	6,463,689
1999					348,528	7,861,114	25,355,706	28,622,285	16,698,461	11,387,595	11,501,280
2000						405,583	7,928,794	26,146,039	29,863,524	21,859,090	21,031,072
2001							142,870	9,285,185	30,114,852	36,233,945	35,027,376
2002								346,903	8,244,051	26,752,652	44,713,858
2003									125,898	6,057,020	38,143,078
2004										32,686	2,078,017
2005											100,773
2006											
TOTAL	192,586	5,473,408	21,797,591	36,906,143	49,741,328	59,930,767	75,930,363	96,285,915	106,958,287	113,997,481	164,128,635

EXHIBIT 2

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S. C. SECOND INJURY FUND
CLAIMS MANAGEMENT SYSTEM
AMOUNT PAID BY FISCAL YEAR

CUMULATIVE
Source - Exhibit 1

YEAR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1995	192,586	5,524,933	21,226,797	36,492,254	44,485,788	49,647,741	53,363,792	55,289,057	57,334,662	58,398,397	59,530,512
1996		141,061	6,076,402	20,758,763	36,693,635	46,468,619	52,577,836	56,604,357	59,789,632	61,114,679	62,883,740
1997			160,386	6,798,360	24,675,950	41,970,679	54,044,038	61,525,796	67,488,601	70,074,259	72,242,576
1998				320,352	7,907,155	27,329,186	47,933,552	66,385,510	77,103,326	83,803,378	90,267,067
1999					348,528	8,209,643	33,565,349	62,187,634	78,886,095	90,273,690	101,774,970
2000						405,583	8,334,377	34,480,416	64,343,940	86,203,030	107,234,102
2001							142,870	9,428,055	39,542,907	75,776,852	110,804,228
2002								346,903	8,590,954	35,343,607	80,057,465
2003									125,898	6,182,918	44,325,996
2004										32,686	2,110,703
2005											100,773
2006											
TOTAL											

EXHIBIT 3

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S. C. SECOND INJURY FUND
CLAIMS MANAGEMENT SYSTEM
AMOUNT PAID BY FISCAL YEAR

COMPARITIVE
Source - Exhibit 2

YEAR	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
1995	1.000	28.688	3.842	1.719	1.219	1.116	1.075	1.036	1.037	1.019	1.019
1996	1.000	43.077	3.416	1.768	1.266	1.131	1.077	1.056	1.022	1.029	1.029
1997		1.000	42.388	3.630	1.701	1.288	1.138	1.097	1.038	1.031	1.031
1998			1.000	24.683	3.456	1.754	1.385	1.161	1.087	1.077	1.077
1999				1.000	23.555	4.089	1.853	1.269	1.144	1.127	1.127
2000					1.000	20.549	4.137	1.866	1.340	1.244	1.244
2001						1.000	65.990	4.194	1.916	1.462	1.462
2002							1.000	24.765	4.114	2.265	2.265
2003								1.000	49.110	7.169	7.169
2004									1.000	64.574	64.574
2005										1.000	1.000
2006											

YEAR	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1995	28.688	3.842	1.719	1.219	1.116	1.075	1.036	1.037	1.019	1.019
1996	43.077	3.416	1.768	1.266	1.131	1.077	1.056	1.022	1.029	1.023
1997	42.388	3.630	1.701	1.288	1.138	1.097	1.038	1.031	1.036	
1998	24.683	3.456	1.754	1.385	1.161	1.087	1.077	1.049		
1999	23.555	4.089	1.853	1.269	1.144	1.127	1.066			
2000	20.549	4.137	1.866	1.340	1.244	1.135				
2001	65.990	4.194	1.916	1.462	1.199					
2002	24.765	4.114	2.265	1.434						
2003	49.110	7.169	1.918							
2004	64.574	4.190								
2005	10.952									

EXHIBIT 4

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S. C. SECOND INJURY FUND

CLAIMS MGMT SYSTEM

AMT PAID BY FISCAL YR

DEVELOPMENT SELECTIONS

Source - Exhibit 2

YEAR	2nd / 1st	3/2	4/3	5/4	6/5	7/6	8/7	9/8	10/9	11/10	12/11						
1995	28.688	3.842	1.719	1.219	1.116	1.075	1.036	1.037	1.019	1.019	<u>1.013</u>						
1996	43.077	3.416	1.768	1.266	1.131	1.077	1.056	1.022	1.029	<u>1.023</u>							
1997	42.388	3.630	1.701	1.288	1.138	1.097	1.038	1.031	<u>1.036</u>								
1998	24.683	3.456	1.754	1.385	1.161	1.087	1.077	<u>1.049</u>									
1999	23.555	4.089	1.853	1.269	1.144	1.127	<u>1.066</u>										
2000	20.549	4.137	1.866	1.340	1.244	<u>1.135</u>											
2001	65.990	4.194	1.916	1.462	<u>1.199</u>												
2002	24.765	4.114	2.265	<u>1.434</u>													
2003	49.110	7.169	<u>1.918</u>														
2004	64.574	<u>4.190</u>															
2005	<u>10.952</u>																
2006																	
TOTAL																	
ave all	38.738	4.227	1.855	1.318	1.156	1.093	1.052	1.030	1.024	1.019							
5 yr ave	44.998	4.741	1.931	1.349	1.164	1.093	1.052	1.030	1.024	1.019							
5 yr hilo	46.150	4.148	1.878	1.337	1.148	1.087	1.052	1.030	1.024	1.019							
median	35.538	4.089	1.810	1.288	1.141	1.087	1.047	1.031	1.024	1.019							
all ave ave	41.356	4.301	1.869	1.323	1.152	1.090	1.051	1.030	1.024	1.019							
last	64.574	7.169	2.265	1.462	1.244	1.127	1.077	1.031	1.029	1.019							
last select	31.000	3.750	1.770	1.300	1.119	1.031	1.028	1.024									
selected	35.500	4.140	1.850	1.400	1.200	1.090	1.052	1.031	1.024	1.019	1.012	1.007	1.003	1.002	1.001	1.000	
cumulative	577.912	16.279	3.932	2.126	1.518	1.265	1.161	1.103	1.070	1.045	1.025						
selected post	18.000	9.000	2.200	1.400	1.140	1.100	1.050	1.030	1.024	1.019	1.025						
cumulative	723.897	40.216	4.468	2.031	1.451	1.273	1.157	1.102	1.070	1.045							

Exhibit 5

Unpaid Claims and Unfunded Liabilities
as of 6/30/2005

year	paid claims	development factor	ultimate claims	unpaid claims	funds remaining	unfunded liability
1995	59,530,512	1.025	61,031,260	1,500,748		
1996	62,883,740	1.045	65,718,822	2,835,082		
1997	72,242,576	1.070	77,311,587	5,069,011		
1998	90,267,067	1.103	99,595,418	9,328,351		
1999	101,774,970	1.161	118,131,781	16,356,811		
2000	107,234,102	1.265	135,670,425	28,436,323		
2001	110,804,228	1.518	168,224,733	57,420,504		
2002	80,057,465	2.126	170,162,313	90,104,849		
2003	44,325,996	<u>3.932</u>	174,297,748	129,971,753		
2004	2,110,703	40.216	84,885,067	82,774,364		
2005	100,773	723.897	72,949,432	72,848,658		
	731,332,132		1,227,978,586	496,646,455	41,638,128	455,008,327

Exhibit 6

Cumulative Payments

YEAR	2006	2007	2008	2009	2010	2011
1995	60,244,879	60,666,593	60,848,592	60,970,290	61,031,260	61,031,260
1996	64,102,808	64,872,042	65,326,146	65,522,124	65,653,168	65,718,822
1997	73,976,398	75,410,509	76,315,435	76,849,643	77,080,192	77,234,352
1998	93,065,346	95,298,914	97,146,385	98,312,142	99,000,327	99,297,328
1999	107,067,269	110,386,354	113,035,626	115,226,942	116,609,666	117,425,933
2000	116,885,171	122,963,200	126,775,059	129,817,661	132,334,314	133,922,326
2001	132,965,074	144,931,931	152,468,391	157,194,911	160,967,589	164,088,117
2002	112,080,451	134,496,541	146,601,229	154,224,493	159,005,453	162,821,583
2003	82,003,092	114,804,329	137,765,194	150,164,062	157,972,593	162,869,744
2004	18,996,328	41,791,922	58,508,691	66,699,908	73,369,899	77,038,393
2005	1,813,919	12,243,950	26,936,690	37,711,366	42,990,957	47,290,053
2006	105,308	1,895,545	17,059,903	37,531,788	52,544,503	59,900,733
2007		110,047	1,980,844	17,827,599	39,220,718	54,909,005
2008			114,999	2,069,982	18,629,841	40,985,650
2009				120,174	2,163,132	19,468,184
2010					125,582	2,260,472
						131,233
	863,306,041	979,871,875	1,080,883,187	1,170,243,085	1,258,699,193	1,346,393,190
	1.0065	1.0045	1.0030	1.0020	1.0010	1.0000
	868,917,530	984,281,299	1,084,125,836	1,172,583,571	1,259,957,892	1,346,393,190
	132,100,407	115,363,768	99,844,538	88,457,735	87,374,321	86,435,298
paid in year	134,516,878	117,474,081	101,670,962	90,075,864	88,972,632	88,016,431

Exhibit 7

year	ultimate	2006		2007		2008		2009		2010		2011	
		paid	unpaid	paid	unpaid	paid	unpaid	paid	unpaid	paid	unpaid	paid	unpaid
1995	61,031	60,245	786	60,667	365	60,849	183	60,970	61	61,031	0	61,031	0
1996	65,719	64,103	1,616	64,872	847	65,326	393	65,522	197	65,653	66	65,719	0
1997	77,312	73,976	3,335	75,411	1,901	76,315	996	76,850	462	77,080	231	77,234	77
1998	99,595	93,065	6,530	95,299	4,297	97,146	2,449	98,312	1,283	99,000	595	99,297	298
1999	118,132	107,067	11,065	110,386	7,745	113,036	5,096	115,227	2,905	116,610	1,522	117,426	706
2000	135,670	116,885	18,785	122,963	12,707	126,775	8,895	129,818	5,853	132,334	3,336	133,922	1,748
2001	168,225	132,965	35,260	144,932	23,293	152,468	15,756	157,195	11,030	160,968	7,257	164,088	4,137
2002	170,162	112,080	58,082	134,497	35,666	146,601	23,561	154,224	15,938	159,005	11,157	162,822	7,341
2003	174,298	82,003	92,295	114,804	59,493	137,765	36,533	150,164	24,134	157,973	16,325	162,870	11,428
2004	84,885	18,996	65,889	41,792	43,093	58,509	26,376	66,700	18,185	73,370	11,515	77,038	7,847
2005	72,949	1,814	71,136	12,244	60,705	26,937	46,013	37,711	35,238	42,991	29,958	47,290	25,659
2006	76,232	105	76,127	1,896	74,337	17,060	59,172	37,532	38,700	52,545	23,688	59,901	16,331
2007	79,663			110	79,553	1,981	77,682	17,828	61,835	39,221	40,442	54,909	24,754
2008	83,247					115	83,132	2,070	81,177	18,630	64,618	40,986	42,262
2009	86,994							120	86,873	2,163	84,830	19,468	67,525
2010	90,908									126	90,783	2,260	88,648
2011	94,999											131	94,868
		unpaid	440,905		404,001		386,238		383,871		386,323		393,629
		funds at yr end	161,570		123,501		108,725		92,230		72,536		71,280
		unfunded	279,335		280,501		277,512		291,641		313,788		322,348

Exhibit 8

	beginning balance	budget appropriation	assessment collected	claims paid	investments	ending balance	assessment levied
2001	47,634,354				\$4,326,043.00	41,234,387	
2002	41,234,387				\$3,039,086.00	39,428,954	
2003	39,428,954				\$3,762,647.00	63,840,956	
2004	63,840,956				\$4,490,322.00	79,119,952	
2005	79,119,952	1,722,131	127,239,110	166,947,142	\$3,641,606.00	41,638,128	
2006	41,638,128	1,859,402	253,305,038	134,516,878	\$3,003,075.21	161,569,961	77,088,530
2007	161,569,961	1,896,590	77,088,530	117,474,081	\$4,212,866.70	123,500,686	85,397,989
2008	123,500,686	1,934,522	85,397,989	101,670,962	\$3,431,908.15	108,725,099	72,584,498
2009	108,725,099	1,973,212	72,584,498	90,075,864	\$2,969,784.29	92,230,305	68,855,579
2010	92,230,305	2,012,677	68,855,579	88,972,632	\$2,434,963.21	72,535,539	86,688,751
2011	72,535,539	2,052,930	86,688,751	88,016,431	\$2,125,357.00	71,280,285	82,748,470

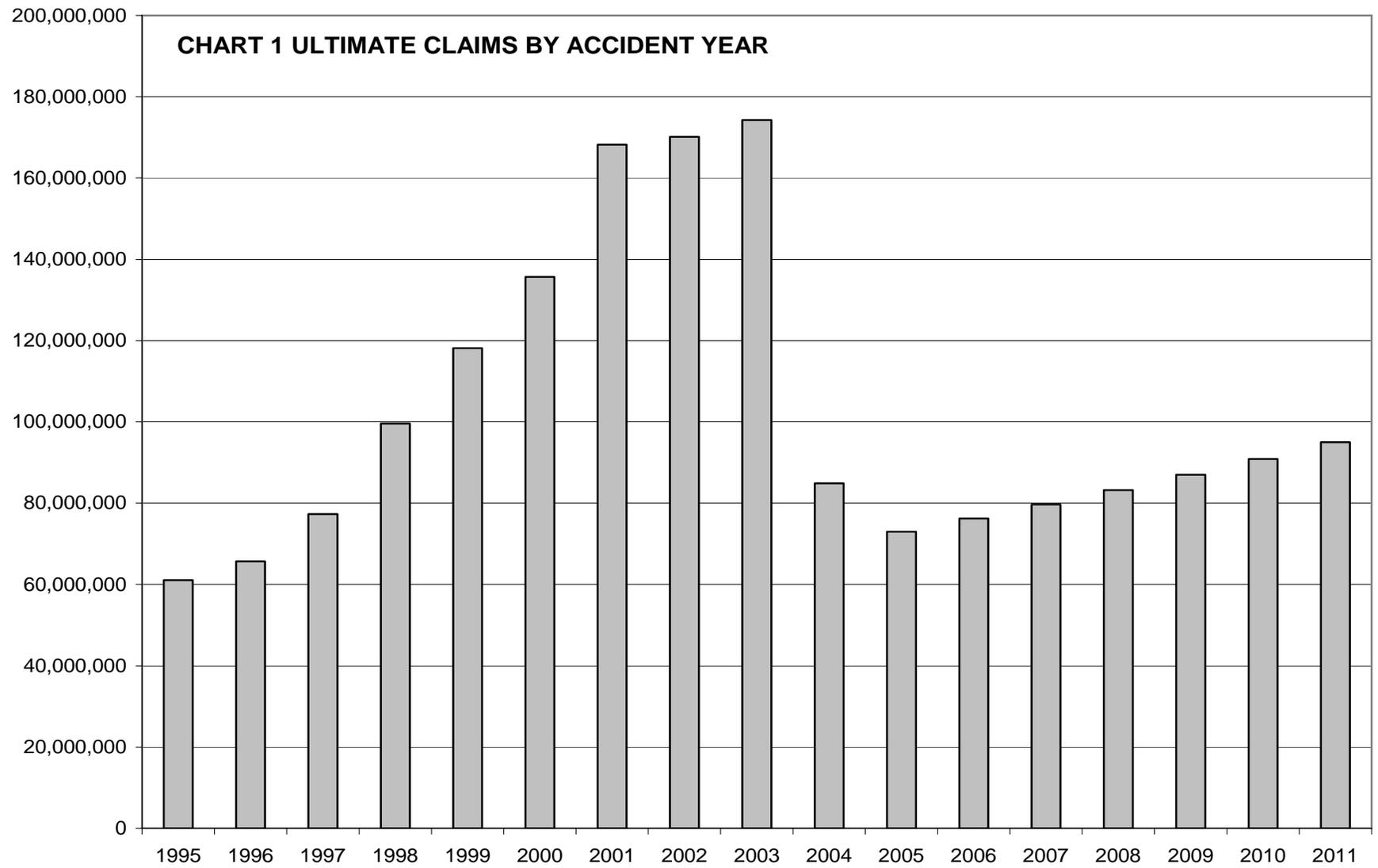


CHART 2
Paid vs. Ultimate as of 6/30/06

